

15

AEROSPACE LTD		Work Order:	19016
Description: Bracket Assembly		Part Number:	D3183-041
			<del>D3183-042</del>
Dwg: D3183 Rev. A page 1, 2, 4		Qty:	1 Kits
		Page 1 of 1	

Step	Location	Procedure	By	Date	Qty																				
1	DC	Issue Traveler	KJ	03.04.08	1																				
2	MV	Cut (1) blank per D3183-041 & <del>(1) blank per D3183-042</del> Cut blanks (2.00" x 1.50") x 4.30" Long Bar Material: 17-4 SS per AMS 5604/5643 (M17-4-B2.000x01.500) Batch: 413087	SL	03/04/09	1																				
3	MV	Machine D3183-1 as per Folio FA320 and Dwg D3183	SL	03/04/10	1																				
4	QC2	Inspect parts as they come off the CNC machine	SL	03/04/10	1																				
5	MV	Machine D3183-2 as per Folio FA320 and Dwg D3183																							
6	QC2	Inspect parts as they come off the CNC machine																							
7	MV	Deburr Break all sharp edges 0.005 to 0.015	SL	03/04/10	1																				
8	MV	Scribe batch number to D3183-1 & <del>D3183-2</del> as per Dwg D3183	SL	03/04/10	1																				
9	QC5	Second check D3183-1 and <del>D3183-2</del>	SL	03/04/10	1																				
10	GA	Assemble D3183-041 as per Dwg D3183 Pick: <table><tr><th>Qty</th><th>Part Number</th><th>Description</th><th>Batch</th></tr><tr><td>2</td><td>D3121-17</td><td>Washer</td><td>B7110536-17</td></tr><tr><td>4</td><td>D3183-5</td><td>Bearing</td><td>M1898</td></tr><tr><td>2</td><td>D3183-7</td><td>Washer</td><td></td></tr><tr><td>2</td><td>MS24694-S50</td><td>Screw</td><td>M11548</td></tr></table>	Qty	Part Number	Description	Batch	2	D3121-17	Washer	B7110536-17	4	D3183-5	Bearing	M1898	2	D3183-7	Washer		2	MS24694-S50	Screw	M11548			
Qty	Part Number	Description	Batch																						
2	D3121-17	Washer	B7110536-17																						
4	D3183-5	Bearing	M1898																						
2	D3183-7	Washer																							
2	MS24694-S50	Screw	M11548																						
11	GA	Assemble D3183-042 as per Dwg D3183 Pick: <table><tr><th>Qty</th><th>Part Number</th><th>Description</th><th>Batch</th></tr><tr><td>2</td><td>D3121-17</td><td>Washer</td><td></td></tr><tr><td>4</td><td>D3183-5</td><td>Bearing</td><td></td></tr><tr><td>2</td><td>D3183-7</td><td>Washer</td><td></td></tr><tr><td>2</td><td>MS24694-S50</td><td>Screw</td><td></td></tr></table>	Qty	Part Number	Description	Batch	2	D3121-17	Washer		4	D3183-5	Bearing		2	D3183-7	Washer		2	MS24694-S50	Screw				
Qty	Part Number	Description	Batch																						
2	D3121-17	Washer																							
4	D3183-5	Bearing																							
2	D3183-7	Washer																							
2	MS24694-S50	Screw																							
12	QC5	Inspect work to Step 10 & 11	SL	03.04.10	1																				
13	ST	Identify and Stock in Spacedoor cell D3183-041 Qty _____ D3183-042 Qty _____	N/A	03.04.10																					
14	AC	Parts to Stock and Prorate Cost to parts per Step 13 Cost / part 403.57	SL	03-04-11																					
15	DC	Close W/O Inspect Level 21 CHANGE TO P302-42		03.04.10																					

Rev	Date	Change	Revised By	Approved
A	03.03.28	New issue	KJ/RF	

Work Order:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Manuf / Design Mgr	Approval QC Inspector

NCR		WORK ORDER NON-CONFORMANCE						
DATE	STEP	Description of NC section A	Corrective Action Section B		Sign & Date	Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial					

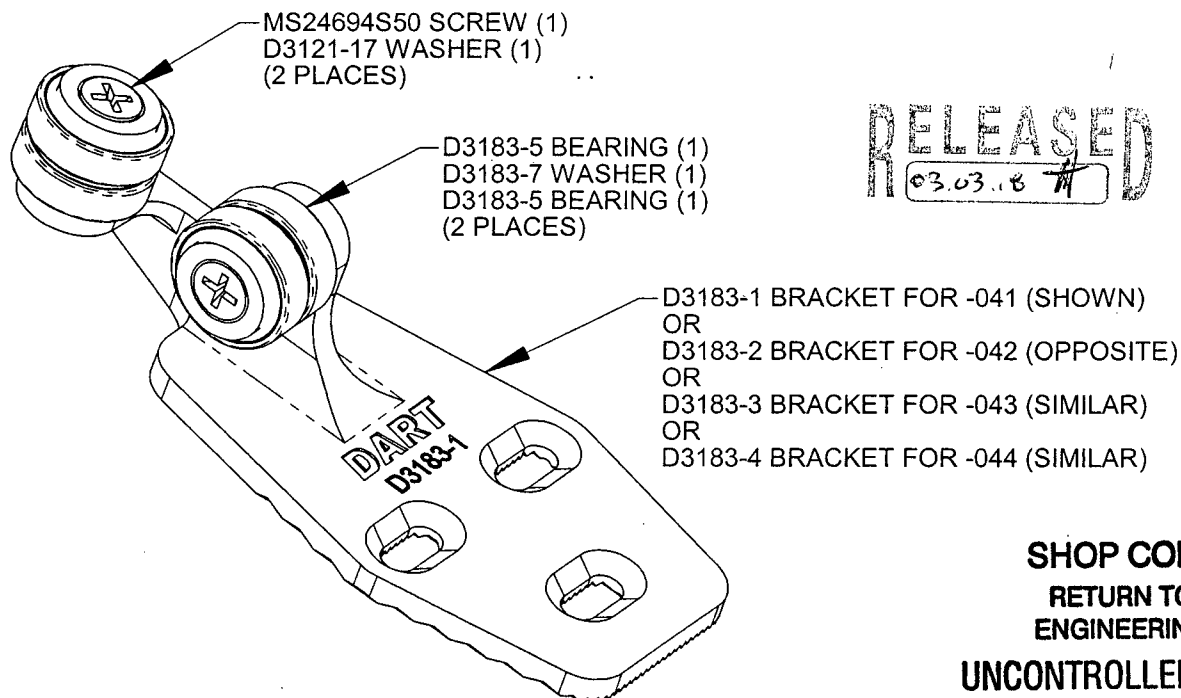
PAR#: \_\_\_\_\_ Fault Category: \_\_\_\_\_ DQA: \_\_\_\_\_ Date: \_\_\_\_\_

**NOTE:** Date & initial all entries  
H:\Admin-QA\ISO\forms\w\oncb.doc

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

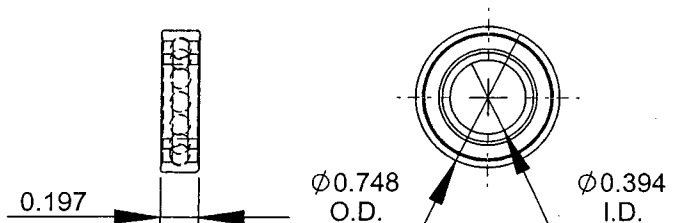


DESIGN CP	DRAWN BY CP	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. <b>D3183</b>	REV. A SHEET 1 OF 4
DATE <b>03.01.24</b>		TITLE <b>BRACKET ASSEMBLY</b>	SCALE 1:1
A	03.01.24	NEW ISSUE	



**D3183-041 BRACKET ASSEMBLY (SHOWN)**  
**D3183-042 BRACKET ASSEMBLY (OPPOSITE)**  
**D3183-043 BRACKET ASSEMBLY (SIMILAR)**  
**D3183-044 BRACKET ASSEMBLY (SIMILAR)**

**SHOP COPY**  
**RETURN TO**  
**ENGINEERING**  
**UNCONTROLLED COPY**  
**SUBJECT TO AMENDMENT**  
**WITHOUT NOTICE**  
**WORK ORDER**  
**NO. 19016**

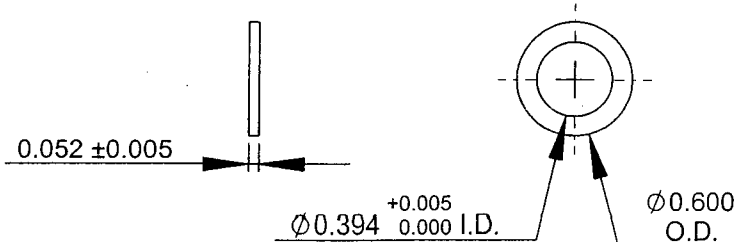


**D3183-5 BEARING:**  
**SPECIFICATION CONTROL DRAWING**

- 1) SINGLE ROW, DEEP GROOVE, CONRAD TYPE, SHIELDED
- 2) POSSIBLE SUPPLIER: NSK P/N 6800ZZ
- 3) ALL DIMENSIONS ARE IN INCHES

**D3183-7 WASHER**

- 1) MATERIAL: AISI 303 ROUND BAR (M303R) ANNEALED
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES



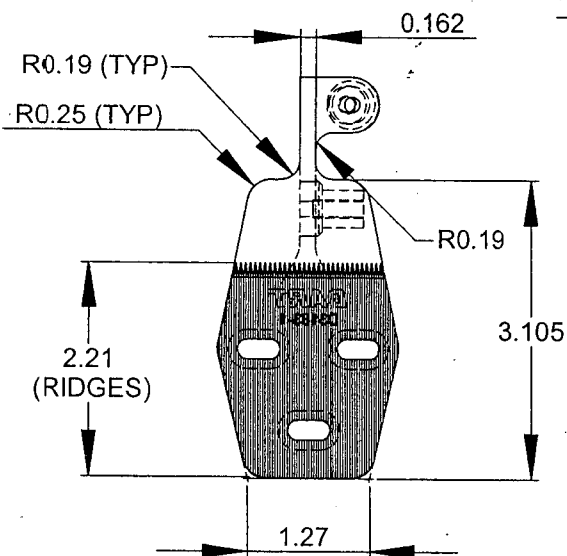
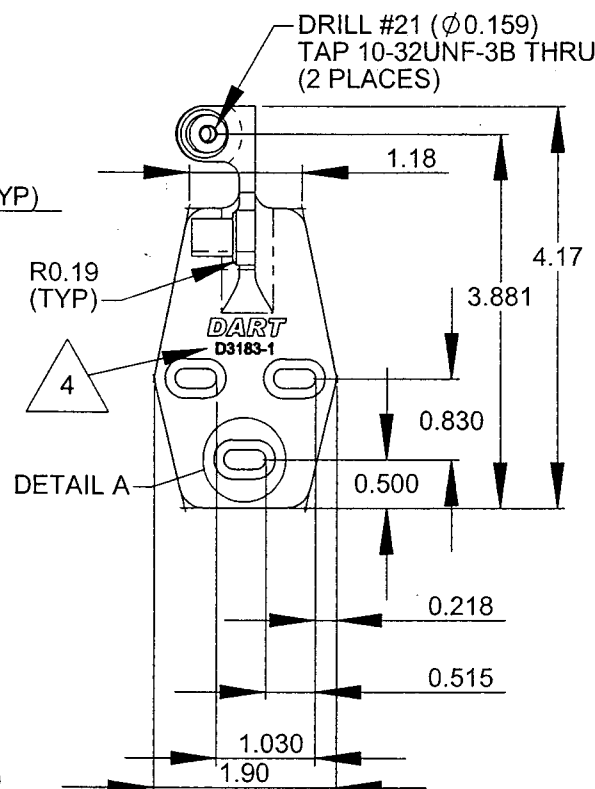
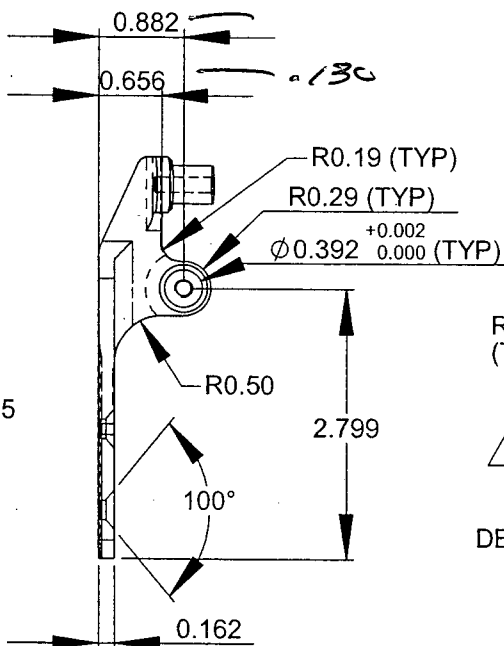
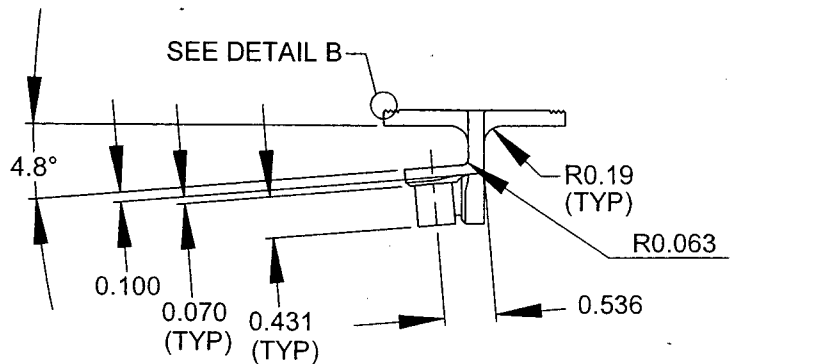
**COPYRIGHT © 2003 BY DART AEROSPACE LTD.**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

**DART**

QA COPY ISSUED

DESIGN	DRAWN BY	<b>DART AEROSPACE LTD</b>
CHECKED	APPROVED	HAWKESBURY, ONTARIO, CANADA
DATE	DRAWING NO.	REV. A
03.01.24	D3183	SHEET 2 OF 4
TITLE	BRACKET ASSEMBLY	SCALE
		1:2



**D3183-1 BRACKET SHOWN  
D3183-2 BRACKET OPPOSITE**

- 1) D3183-1 CAN BE MADE FROM D3183-3  
D3183-2 CAN BE MADE FROM D3183-4
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643  
(REF DART SPEC. M17-4-B)  
MIN ULTIMATE STRENGTH = 96 ksi  
MIN YIELD STRENGTH = 64 ksi
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 4) ENGRAVE DART P/N & LOGO AS SHOWN
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

**SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 19016**

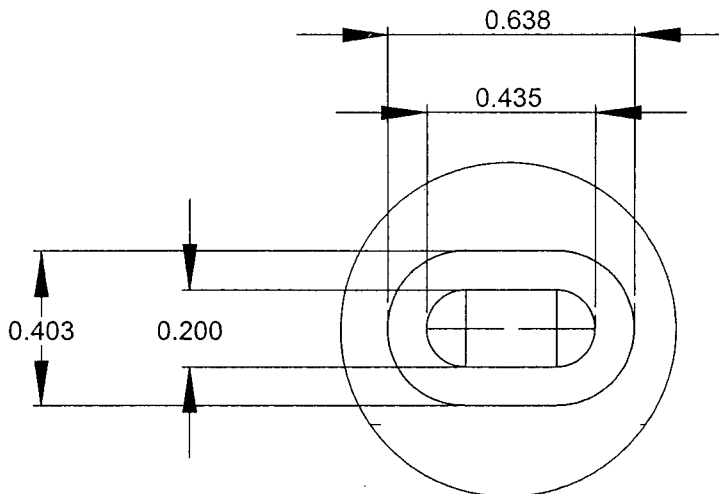
RELEASED  
03.03.12

COPYRIGHT © 2003 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3183	REV. A SHEET 4 OF 4
DATE 03.01.24		TITLE BRACKET ASSEMBLY	SCALE 1:1

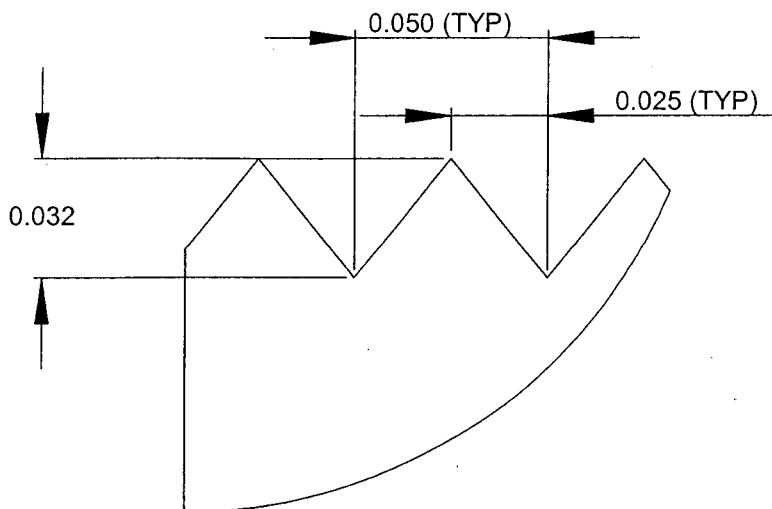


DETAIL A (2 : 1)

SHOP COPY  
RETURN TO  
ENGINEERING

UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE

WORK ORDER  
NO. 19016



DETAIL B (20 : 1)

RELEASED  
03.03.18 *[Signature]*

COPYRIGHT © 2003 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

# Job Costing Report

Dart Aerospace Ltd.  
Hawkesbury

Apr 08, 2003  
01:56 pm

Work Order No : 0019016  
Project Name : D3183-041  
Project For : WK315  
Work Order Type : Main  
Main WO Number :  
House Part Number : D3183-041  
Description : Bracket Assembly  
Manufactured : Yes  
Amount Req'd : 1  
Amount Done : 0  
Start Date : 04-08-03  
Est Finish Date : 04-10-03  
Act Finish Date :  
Drawings Req'd : No  
Ok for Approval :  
Approval Rec'd :

Department Code:  
Burden Flags : NNNNNNN  
WO Status : Open  
Invoice State : Not Invoiced  
Invoice Date :  
Invoice Number :  
Invoice Amount : 0.00  
Order Entry No :  
OE Value : 0.00  
Est Margin : 0.000%  
Actual Margin : 0.000%  
\$0 Posted to Finished Goods

	Estimated	Actual	Var. %	Posted	To Post
Material Cost :	0.00	0.00	0.00	0.00	0.00
Engineering Hours :	0.00	0.00	0.00	0.00	0.00
Engineering Cost :	0.00	0.00	0.00	0.00	0.00
Production Hours :	0.00	0.00	0.00	0.00	0.00
Production Cost :	0.00	0.00	0.00	0.00	0.00
Testing Hours :	0.00	0.00	0.00	0.00	0.00
Testing Cost :	0.00	0.00	0.00	0.00	0.00
OverHead Hours :	0.00	0.00	0.00	0.00	0.00
OverHead Cost :	0.00	0.00	0.00	0.00	0.00
SubContract Hours :	0.00	0.00	0.00	0.00	0.00
SubContract :	0.00	0.00	0.00	0.00	0.00
Misc. Hours :	0.00	0.00	0.00	0.00	0.00
Misc. :	0.00	0.00	0.00	0.00	0.00
Burden :	0.00	0.00	0.00		
Total Cost :	0.00	0.00	0.00		
Margin :	0.000	0.000			
Selling Cost :	0.00	0.00			

	Estimated	Actual
Labour Hrs/Amount Done :	0.00	0.00
Profits/(Loss) :	0.00	0.00



Dart Aerospace, Ltd  
1270 Aberdeen Street  
Hawksbury, Ontario  
K6A 1K7  
Tel: (613) 632-3336 Fax: (613) 632-4443

Supplier Code: \_\_\_\_\_ Sheet \_\_\_\_ of \_\_\_\_

## INSPECTION CHECKLIST

PART NO.: D3183-1 PHY. CHANGE: \_\_\_\_\_  
DESCRIPTION: Bracket assembly DRAWING CHANGE: Rev A  
MANUFACTURING DATE: 03/04/10 UNICORP E.O.'S: \_\_\_\_\_  
BATCH NO.: 19016 \_\_\_\_\_  
SERIAL NO.: \_\_\_\_\_ PURCHASE ORDER NO.: \_\_\_\_\_  
QUANTITY ACCPT. \_\_\_\_\_ REJ. \_\_\_\_\_ DATA SHEET NO.: \_\_\_\_\_

☒ FIRST ARTICLE ☐ PERIODIC CONFORMITY ☐ FINAL INSPECTION

ITEM	DWG PAGE	DRAWING DIMENSION	TOL.	ACTUAL DIMENSION	ACC.	REJ.	% OF INSP.	Method of Inspection	Comments
1	1	1.162	±.00	1.165	✓		100%	MIC	
1	1	2.19	±.00	2.19	✓			R-G	
1	1	2.23	"	2.25	✓			"	
1	1	3.105	±.010	3.109	✓			Vern	
1	1	2.21	±.00	2.210	✓			"	
1	1	1.882	±.010	1.015		✓		Vern	1.30" was requested by engineer
1	1	1.656	"	1.785		✓		"	
1	1	0.392	±.003	0.393	✓			MIC	
1	1	2.799	±.00	2.799	✓			H-G	
1	1	2.500	±.00	2.500	✓			R-G	
1	1	1.162	±.010	1.163	✓			MIC	
1	1	2.063	±.00	2.063	✓			R-G	
1	1	1.431	"	1.433	✓			Vern	
1	1	1.070	"	1.063	✓			"	
1	1	1.100	"	1.104	✓			"	
1	1	4.17	±.030	4.179	✓			H-G	
1	1	3.331	±.010	3.331	✓			Vern	
1	1	1.330	"	1.336	✓			"	
1	1	1.500	"	1.493	✓			"	
1	1	1.213	"	1.213	✓			"	
1	1	1.030	"	1.033	✓			"	
1	1	1.90	±.00	1.881	✓			"	
1	2	1.638	±.010	1.632	✓			Vern	
1	2	1.435	"	1.433	✓			"	
1	2	1.200	"	1.199	✓			"	
1	2	1.403	"	1.396	✓			"	

H:\admin-qaiso\forms\first article inspectionA

Rev. B

Measured by: SP

Audited by: TR

Approved by: —